

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**COMPLETE IF KNOWN**

Application Number	09/888,084
Confirmation Number	8101
Filing Date	June 21, 2001
First Named Inventor	Whonchee Lee
Group Art Unit	3723
Examiner Name	
Attorney Docket No.	108298515US1

Sheet

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of

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**U.S. PATENT DOCUMENTS**

*EXAMINER INITIALS	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code (if known)			
DVN	AA	6,176,992 ✓		Talieh	1/23/01	
	AB	5,930,699 ✓		Bhatia	7/27/99	
	AC	5,807,165 ✓		Uzoh et al.	9/15/98	
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					

**FOREIGN PATENT DOCUMENTS**

*EXAMINER INITIALS	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Office	Number	Kind Code (if known)				
	AK							
	AL							
	AM							
	AN							
	AO							

**OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS**

*EXAMINER INITIALS	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume/issue number(s), publisher, city and/or country where published.	T
DVN	AP	SEILCHI KONDO, NORIYUKI SAKUMA, YOSHIO HOMMA, YASUSHI GOTO, NAOFUMI Ohashi, Hizuru Yamaguchi, and Nobuo Owada, "Abrasive-Free Polishing for Copper Damascene Interconnection", <i>Journal of the Electrochemical Society</i> , 147 (10):3907-3913 (2000)	
DVN	AQ	McGraw-Hill, <i>Concise Encyclopedia of Science &amp; Technology</i> , Sybil P. Parker, Editor in Chief, Fourth Edition, p. 367, McGraw-Hill, NY, NY, 1992.	
	AR		

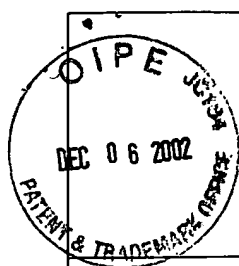
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6-12-2003

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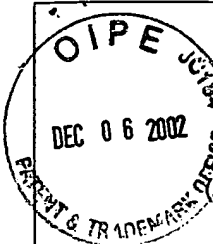
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.	T
DVN	CH ✓	FRANKENTHAL, R.P. and EATON, D.H., "Electroetching of Platinum in the Titanium-Platinum-Gold Metallization on Silicon Integrated Circuits," <i>Journal of The Electrochemical Society</i> , Vol. 123, No. 5, pp. 703-706, May 1976.	
	CI ✓	BERNHARDT, A.F., CONTOLINI, R.J., MAYER, S.T., "Electrochemical Planarization for Multi-Level Metallization of Microcircuitry," <i>CircuitTree Journal</i> , Vol. 8, No. 10, pp. 38, 40, 42, 44, 46, and 48, Oct. 1995.	
	CJ ✓	HUANG, C.S. et al., "A Novel UV Baking Process to Improve DUV Photoresist Hardness," pp. 135-138.	
	CK ✓	ATMI Table of Contents, presented at the Semicon West '99 Low Dielectric Materials Technology Conference, July 12, 1999, pp. 13-25.	
	CL ✓	Micro Photonics, Inc., CSM Application Bulletin, "Low-load Micro Scratch Tester (MST) for characterisation of thin polymer films," <a href="http://www.microphotonics.com/mstABpoly.html">http://www.microphotonics.com/mstABpoly.html</a> , 7/25/2002, 3 pages.	
	CM ✓	Micro Photonics, Inc., "CSM Nano Hardness Tester," <a href="http://www.microphotonics.com/nht.html">http://www.microphotonics.com/nht.html</a> , 7/29/2002, 6 pages.	
	CN ✓	PhysicsWorld – Table of Contents, PhysicsWeb, "Hard Materials," <a href="http://physicsweb.org/box/world/11/1/11/world-11-1-11-1">http://physicsweb.org/box/world/11/1/11/world-11-1-11-1</a> , 7/29/2002, 1 page.	

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EXAMINER <i>Jung van Nguyen</i>	DATE CONSIDERED <i>6-12-2003</i>
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				Confirmation Number	8101
				Filing Date	June 21, 2001
				First Named Inventor	Whonchee Lee
				Group Art Unit	3723
Examiner Name	Not yet assigned				
Attorney Docket No.	108298515US1				
Sheet	3	of	4		

U.S. PATENT DOCUMENTS						
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		NUMBER	Kind Code (if known)			
dvN	BO✓	6,100,197		Hasegawa	08/08/2000	
	BP✓	6,103,628		Talieh	08/15/2000	
	BQ✓	6,117,781		Lukanc et al.	09/12/2000	
	BR✓	6,143,155		Adams et al.	11/07/2000	
	BS✓	6,196,899	B1	Chopra et al.	03/06/2001	
	BT✓	6,206,756	B1	Chopra et al.	03/27/2001	
	BU✓	6,218,309	B1	Miller et al.	04/17/2001	
	BV✓	6,250,994	B1	Chopra et al.	06/26/2001	
	BW✓	6,273,786	B1	Chopra et al.	08/14/2001	
	BX✓	6,276,996	B1	Chopra	08/21/2001	
	BY✓	6,287,974	B1	Miller	09/11/2001	
	BZ✓	6,313,038	B1	Chopra et al.	11/06/2001	
	CA✓	6,328,632	B1	Chopra	12/11/2001	
	CB	6,368,190	B1	Easter et al.	04/09/2002	


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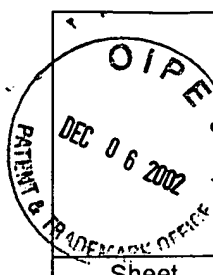
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent or Application		Name of Patentee or Applicant of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office	NUMBER			
dvN	CC✓	WO	00/26443	Talieh	05/11/2000	
	CD✓	WO	00/28586	Chopra	05/18/2000	
	CE✓	WO	00/32356	Talieh	06/08/2000	
	CF✓	WO	00/59008	Talieh	10/05/2000	
	CG	WO✓	00/59682	Talieh	10/12/2000	

OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.	T

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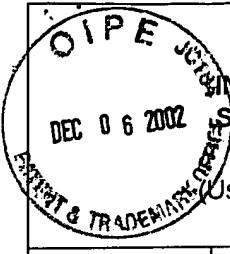
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DNV	AP✓	5,575,885		Hirabayashi et al.	11/19/1996	
	AQ✓	5,618,381		Doan et al.	04/08/1997	
	AR✓	5,676,587		Landers et al.	10/14/1997	
	AS✓	5,681,423		Sandhu et al.	10/28/1997	
	AT✓	5,780,358		Zhou et al.	07/14/1998	
	AU✓	5,840,629		Carpio	11/24/1998	
	AV✓	5,846,398		Carpio	12/08/1998	
	AW✓	5,863,307		Zhou et al.	01/26/1999	
	AX✓	5,897,375		Watts et al.	04/27/1999	
	AY✓	5,934,980		Koos et al.	08/10/1999	
	AZ✓	5,954,975		Cadien et al.	09/21/1999	
	BA✓	5,954,997		Kaufman et al.	09/21/1999	
	BB✓	5,972,792		Hudson	10/26/1999	
	BC✓	6,001,730		Farkas et al.	12/14/1999	
	BD✓	6,010,964		Glass	01/04/2000	
	BE✓	6,039,633		Chopra	03/21/2000	
	BF✓	6,046,099		Cadien et al.	04/04/2000	
	BG✓	6,051,496		Jang	04/18/2000	
	BH✓	6,060,386		Givens	05/09/2000	
	BI✓	6,060,395		Skrovan et al.	05/09/2000	
	BJ✓	6,063,306		Kaufman et al.	05/16/2000	
	BK✓	6,066,030		Uzoh	05/23/2000	
	BL✓	6,066,559		Gonzalez et al.	05/23/2000	
	BM✓	6,068,787		Grumbine et al.	05/30/2000	
↓	BN✓	6,083,840		Mravic et al.	07/04/2000	

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				Confirmation Number	8101
				Filing Date	June 21, 2001
				First Named Inventor	Whonchee Lee
				Group Art Unit	3723
Examiner Name	Not yet assigned				
Sheet	1	of	4	Attorney Docket No.	108298515US1

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	U.S. Patent or Application		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code (if known)			
DVW	AA✓	U.S. Application No. 09/651,779✓ (Atty. Docket No. 10829.8515US)		Moore	Filed 08/30/2000	
	AB✓	U.S. Application No. 09/651,808 (Atty. Docket No. 4373US)		Chopra et al.	Filed 08/30/2000	
	AC✓	U.S. Application No. 09/653,392 (Atty. Docket No. MTI-31044)		Chopra et al.	Filed 08/31/2000	
	AD	U.S. Application No. 09/887,767 (Atty. Docket No. 10829.8515US2)		Lee et al.	Filed 06/21/2001	
	AE✓	U.S. Application No. 09/888,002 (Atty. Docket No. 10829.8515US3)		Lee et al.	Filed 06/21/2001	<b>RECEIVED</b> DEC - 9 2002
	AF✓	U.S. Application No. 10/230,463 (Atty. Docket No. 10829.8672US)		Lee et al.	Filed 08/29/2002	TECHNOLOGY CENTER R3700
	AG✓	U.S. Application No. 10/230,602 (Atty. Docket No. 10829.8674US)		Chopra	Filed 08/29/2002	
	AH✓	U.S. Application No. 10/230,628 (Atty. Docket No. 10829.8673US)		Lee et al.	Filed 08/29/2002	
	AI✓	U.S. Application No. 10/230,970 (Atty. Docket No. 10829.8515US6)		Lee et al.	Filed 08/29/2002	
	AJ✓	U.S. Application No. 10/230,972 (Atty. Docket No. 10829.8515US7)		Lee et al.	Filed 08/29/2002	
	AK✓	U.S. Application No. 10/230,973 (Atty. Docket No. 10829.8515US8)		Lee et al.	Filed 08/29/2002	
	AL✓	4,839,005		Katsumoto et al.	06/13/1989	
	AM✓	5,244,534		Yu et al.	09/14/1993	
	AN✓	5,300,155		Sandhu et al.	04/05/1994	
	AO✓	5,567,300		Datta et al.	10/22/1996	

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Group Art Unit	3723
Examiner Name	Dung V. Nguyen
Attorney Docket No.	108298515US3

Sheet	1	of	1
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## U.S. PATENT DOCUMENTS

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DVN		6,299,741	B1	Sun et al.	10/09/2001	

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SVN	AA	U.S. Application No. 10/090,869 / (Atty. Docket No. 10829.8544US)		Moore et al.	Filed 03/04/2002	

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		NUMBER	Kind Code (if known)			
DVN		20010036746✓	A1	Sato et al.	11/01/2001	
		20020052126✓	A1	Lee et al.	05/02/2002	
		20020070126✓	A1	Sato et al.	06/13/2002	
		5,911,619✓		Uzoh et al.	06/15/1999	
		6,033,953✓		Aoki et al.	03/07/2000	
		6,121,152✓		Adams et al.	09/19/2000	
		6,171,467✓	B1	Weihs et al.	01/09/2001	
		6,187,651✓	B1	Oh	02/13/2001	

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		Office	NUMBER	Kind Code (if known)				
DVN		EP	0459397✓	A2, A3	Kabushiki Kaisha Toshiba	12/04/1991		
		JP	2001077117✓	A1	Sony Corp.	03/23/2001		
		WO	02/064314✓	A1	Speedfam-IPEC Corporation	08/22/2002		

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DVN		D'HEURLE, F.M. and K.C. PARK, IBM Technical Disclosure Bulletin, Electrolytic Process for Metal Pattern Generation, Vol. 17, No. 1, pp. 271-272, June 1974, XP-002235691, NN 7406271.✓	
		ABOAF, J.A. and R.W. BROADIE, IBM Technical Disclosure Bulletin, Rounding of Square-Shape Holes in Silicon Wafers, Vol. 19, No. 8, p. 3042, January 1977, XP-002235690, NN 77013042.✓	
		BASSOUS, E., IBM Technical Disclosure Bulletin, Low Temperature Methods for Rounding Silicon Nozzles, Vol. 20, No. 2, July 1977, pp. 810-811, XP-002235692, NN 7707810.✓	
		PCT International Search Report, International Application Number PCT/US02/19495, March 31, 2003.✓	
		PCT International Search Report, International Application Number PCT/US02/19496, April 4, 2003.✓	

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